Let’s look for leaders — we need them! A survey on the authentic leadership competences among nursing students

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Abstract

Background. Deficiencies among nursing staff results in a lower quality of nursing care, thereby threatening patients’ safety. A potential way to deal with the problem of insufficient nursing care is to implement effective leadership. Universities play a key role in creating future leaders who are able to initiate changes in health care systems. As leadership education requires adequate support (including financial aid and mentoring), it is necessary to identify those who would most benefit from additional training by analyzing natural leadership competences. To date, the issue of nursing leadership, especially authentic leadership, in Poland has not been sufficiently described. This study aimed to assess the level of competence in authentic leadership in a group of nursing students in Poland.

Methods. A total of 99 students (93 women and 6 men) from the Nursing Division, Faculty of Health Sciences, Medical University of Warsaw were recruited, including 58 students in their first year of first cycle (54 women and 4 men) and 41 students in their second year of the masters program (39 women and 2 men). The average age was 26.17 years (min. 24, max. 47, SD: 5.630). Students were assessed using the pen and paper interview (PAPI) method, and an anonymous Authentic Leadership Questionnaire (ALQ). The ALQ comprises 16 statements rated using the Likert scale, ranging from 1 (totally disagree) to 5, in four dimensions: self-awareness, ethics/morality, balanced processing, and transparency in relationships. Data was analyzed using descriptive statistics. The reliability of the questionnaire measured by Cronbach’s alpha coefficient was 0.781.

Results. Only 24% of students had a high level of leadership competency (16–20 points) in the self-awareness dimension. Students achieved a low score (15 points or below) in the other dimensions (ethics/morality, balanced processing, and transparency in relations).

Conclusion. The overall level of leadership competency among the study group of nursing students in Poland was low. Nursing students with higher levels of authentic leadership competencies should be identified and given additional individual support from their home universities during their studies to provide future leaders for our health care system.

Key words: social competences, nursing program, students, leadership

Słowa kluczowe: kompetencje społeczne, programu opieki, studenci, przywództwo

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Background

The need for nursing care has increased in recent years in Poland, as well as in other European countries and worldwide, due to the aging of society and the increasing incidence of chronic diseases [1–9]. At the same time, the number of nurses is decreasing rapidly. The rate of nurses employed in health care facilities per 1,000 citizens in Poland is now among the lowest in Europe: the rate in Poland is 5.2, while it is 7.5 in France, 8.1 in the Czech Republic, 8.6 in Hungary, 9.6 in Germany, and 9.2 in the UK [1].

In addition to the declining numbers of nurses, the average age in the profession of nurse is growing rapidly – from 48 years in 2008 to 50.80 years in 2017 [1]. Indeed, nurses at retirement age (over 61 years) currently represent 19.52% of nursing professional staff, while only 5.53% are aged 21–30 years [1]. Furthermore, while every year about 5,000 nursing and midwifery graduates leave Polish medical universities, only a small proportion of them will then work in the profession. A report by the Main Council of Nurses and Midwives on “Securing the care of nurses and midwives to the Polish society” indicated that only 1,000 people were employed as nurses from a total of 3,300 who were authorized to exercise their profession in 2016.

As a result of the abovementioned factors, we are facing an increased deficiency in nursing staff in Poland. This deficiency results in a lower quality of nursing care and services, thereby threatening patients’ safety. As such, there is an urgent need to implement effective leadership in nursing as a way to deal with the problem of insufficient nursing care [1].

Promoting competent leadership in health care was the subject of a lecture by Laura Serrant from Sheffield Hallam University (England) at the inaugural session of the 13th Congress of Polish Nurses held in Warsaw in September 2016 – one of the most important scientific events in the nursing community in Poland [9]. The need to promote leadership in the nursing community in Poland was also emphasized by Prof. Maria Kózka, National Consultant in Nursing at the “Debate on problems of Nursing and Midwifery in Poland” held on March 27, 2017 at the Medical University of Warsaw, the largest medical school in Poland [10]. Training conferences for nursing staff that highlight the need to create leaders acting for change in the health care system, and thus strengthening the role of nurses within this system, are also being organized increasingly more frequently [11].

Both national and international literature on the issue of leadership in nursing emphasize the difference between the role of leaders and the role of managers of health care institutions, including nursing managers and ward nurses [2–8]. The role of leaders is to effectively design the change and drive its implementation, while health care managers are more responsible for the productivity of work in the organization. A leader is usually focused on the goals of the organization, takes the initiative to develop a strategic plan, introduces new concepts, and encourages discussion and criticism of the methods or results of the organization’s policies. Meanwhile, the manager focuses on the methods of work, and selects and applies appropriate indicators and measures of its results [2–8]. It therefore seems natural that the role of nursing leaders should be taken by young people who are entering the labor market and beginning their careers in nursing, but also by those with natural leadership competencies. The process of selecting potential leaders should be played by universities, which, by enhancing and improving the leadership skills in students during university courses, could create future leaders able to initiate changes in health care systems.

Many concepts of leadership are presented in world literature, including shaping the leaders in nursing, based on different theoretical models [2–8]. In recent years, literature highlights that one of the most relevant concepts that also applies in nursing is the concept of authentic leadership. This concept was developed in the nineties by Ladkin and Taylor, and was originally created to shape the leadership attitudes of sociology and pedagogy students [8].

Authentic leadership is a positive relationship-focused leadership style that emphasizes self-awareness, honesty and transparency, behavioral integrity, and consistency [12]. In fact, authentic leadership has been posited as a “root construct” or key ingredient of other positive forms of leadership [13], and is theorized to influence performance through emphasis on people’s strengths rather than weaknesses [14]. Authentic leadership is “a pattern of transparent and ethical leader behavior that encourages openness in sharing information needed to make decisions while accepting input from those who follow” [15].

Authentic leaders build trusting work environments that engage followers through four types of behaviors: balanced processing, relational transparency, internalized moral perspective, and self-awareness [16]. Balanced processing refers to behaviors of leaders who try to gather and analyze all relevant data and viewpoints, both positive and negative, before making important decisions. Relational transparency involves being open with others, sharing thoughts and feelings, and encouraging others to share their ideas, challenges and opinions. Internalized moral perspective refers to self-regulation that is guided by internal moral standards and values resulting in behaviors and decisions consistent with those values. Finally, authentic leaders show self-awareness by acknowledging their own strengths and weaknesses, and understanding how they affect others.

Authentic leaders create conditions that foster trust and promote employee identification with leaders and the organization, thereby building confidence and accomplishing work goals, culminating in increased employee and organizational performance. They demonstrate a sense of genuine caring for employees, and for open and honest dialogue about what is and is not working well in their work relationships based on ethical and moral standards. In nursing, authentic leadership has been linked to greater trust in management, empower-
ment, work engagement, and higher ratings of patient care quality [17, 18].

This study aimed to evaluate the potential of authentic leadership among a group of nursing students in Poland.

**Methods**

The study involved 99 students (93 women and 6 men) from the Nursing Division of the Faculty of the Medical University of Warsaw: 58 students in their first year of first cycle (54 women and 4 men) and 41 students in their second year of a masters program (39 women and 2 men). The percentage of survey return was 29% (99/341): the total number of students was 341 (185 students in the first year of the first cycle and 156 students in the second year of the masters program). Seventeen people lived either in a village or a city over 500,000 inhabitants, 14 students lived in cities with no more than 100,000 inhabitants, and only 8 respondents lived in a city with 101,000 to 500,000 inhabitants. The average age of respondents was 26.17 years (min. 24, max. 47, standard deviation [SD]: 5.630).

The study was conducted with the Pen and Paper Interview (PAPI) method. Participation in the survey was voluntary, and the survey questionnaire was filled in anonymously by the students.

A standardized form of the Authentic Leadership Questionnaire (ALQ) was used for the survey [16]. Author’s written consent was obtained for using the tool in the study on students of the Nursing Division, Faculty of Health Sciences, Medical University of Warsaw. The questionnaire was filled in by students in Polish. Language adaptation of the questionnaire was conducted by two professional translators and staff of the Department of Teaching and Learning Effectiveness of the Faculty of Health Science, Medical University of Warsaw, who adapted the questionnaire to Polish cultural conditions. The ALQ consists of 16 statements that are rated using Likert’s scale from 1 (I totally disagree) to 5 (I totally agree).

The ALQ was developed to measure self-assessment of leadership competencies by assessing four dimensions of leadership: self-awareness, ethics/morality, balanced processing, and transparency in relationships. The dimension of self-awareness is determined by questions 1, 5, 9, and 13; ethics/morality is determined by questions 2, 6, 10, and 14; balanced processing is determined by questions 3, 7, 11, and 15; and transparency in relationships is determined by questions 4, 8, 12, and 16 [16]. The results are interpreted according to the number of points obtained on each scale: a high score is within the range of 16–20 points, while a low score is 15 points or less. Higher scores more strongly indicate having an authentic leadership style, while lower scores indicate more weakly having characteristics of an authentic leader. The reliability of the questionnaire measured by Cronbach’s alpha coefficient was 0.781.

First year students completed the questionnaire on June 8, 2017 during classes on the subject “Anesthesiology”. Students in the second year of the masters program (second cycle) completed the questionnaire on June 8, 2017 during the course “Transplantology and care of a patient with intestinal fistula, chronic wounds, and vascular disorders”. The survey was conducted upon the teacher’s consent, in less than 15 minutes. The authors of the study were present in the didactic room at the time of filling the questionnaires, and answered any questions or doubts from students regarding the purpose of the study.

**Results**

A high level of leadership competency (score 16–20) was found in the study group in the dimension of self-awareness, although this only was observed in less than 25% of nursing students. Students achieved a low score in all other analyzed areas (i.e., ethics/morality, balanced processing, and transparency in relations), indicating a low level of the analyzed competencies. Detailed results of the analysis of the level of leadership competencies in the study group of nursing students are presented in Table I and Table II.

**Discussion**

The widely understood issues of effective leadership in nursing have been addressed in the world literature for years in different contexts. Certainly, the most important of them is the aspect of leadership in everyday clinical practice (Clinical Nurse Leaders). However, only a few publications describe the activities of Polish nurse leaders, primarily in the historical aspect [20, 21]. Indeed, nursing leadership in Poland has not been sufficiently described so far [22, 23].

The specific issue of authentic leadership, which we addressed in this study, has only been described in two previous Polish studies [24, 25]. The concept of authentic leadership was first presented in a review by Sierpińska on the tools available for assessing the effectiveness of leadership in the health care system in Poland, in which the ALQ was considered an optimal tool [24]. Sierpińska subsequently validated the ALQ, adapted it to Polish conditions, and demonstrated that it is a reliable tool.
As Sierpińska’s adaptation was made solely for research on Polish nurses working in the health care system [25], we decided to further validate the ALQ for investigating the level of leadership competency in a group of students. Indeed, we found this tool was also effective (Cronbach’s alpha coefficient of 0.781) in a student population. In our opinion, a group of nursing students is particularly important when considering the issue of effective leadership and shaping future leaders in health care in Poland. Unfortunately, there are currently insufficient numbers of nurses and the average age of nurses is increasing. Moreover, there is a lack of interest in the nursing profession among candidates for higher education. Therefore, universities must select potential leaders of changes in health care, and enhance their leadership competencies, during their nursing studies.

According to recommendations by the Institute of Medicine (IOM), nursing leadership classes are included in obligatory study programs in many universities around the world. When discussing the effectiveness of the methods of strengthening leadership among nursing students presented in the world literature, several factors have to be highlighted that significantly influence their effectiveness, including appropriate time of classes, practical aspects, and mentoring [2–8]. In most universities that shape student leaders’ attitudes, classes strengthening these competences are conducted either in the last year of bachelor studies or during master’s programs [2–4].

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Self-awareness</th>
<th>Ethics/morality</th>
<th>Balanced processing</th>
<th>Transparency in relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low score (below 15 pts)</td>
<td><em>n</em> = 17 (17%)</td>
<td><em>n</em> = 24 (24%)</td>
<td><em>n</em> = 25 (25%)</td>
<td><em>n</em> = 30 (30%)</td>
</tr>
<tr>
<td>High score (16–20 pts)</td>
<td><em>n</em> = 24 (24%)</td>
<td><em>n</em> = 17 (17%)</td>
<td><em>n</em> = 16 (16%)</td>
<td><em>n</em> = 11 (11%)</td>
</tr>
<tr>
<td>Mean (M)</td>
<td>15.170</td>
<td>14.609</td>
<td>14.487</td>
<td>14.024</td>
</tr>
<tr>
<td>SD</td>
<td>2.488</td>
<td>2.477</td>
<td>2.328</td>
<td>2.300</td>
</tr>
<tr>
<td>Min.</td>
<td>8</td>
<td>8</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Max.</td>
<td>20</td>
<td>19</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Median</td>
<td>16</td>
<td>15</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Mode</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

Table I. Level of leadership competencies in the study group of nursing students in Poland based on the Authentic Leadership Questionnaire.
Source: Own study.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean (M)</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can list my three greatest weaknesses</td>
<td>4.024</td>
<td>4</td>
<td>1.093</td>
</tr>
<tr>
<td>My actions reflect my core values</td>
<td>3.659</td>
<td>4</td>
<td>0.953</td>
</tr>
<tr>
<td>I seek other’s opinions before making up my own mind</td>
<td>3.024</td>
<td>3</td>
<td>1.179</td>
</tr>
<tr>
<td>I openly share my feelings with others</td>
<td>3.561</td>
<td>4</td>
<td>1.037</td>
</tr>
<tr>
<td>I can list my three greatest strengths</td>
<td>3.805</td>
<td>4</td>
<td>0.943</td>
</tr>
<tr>
<td>I do not allow group pressure to control me</td>
<td>3.317</td>
<td>4</td>
<td>1.069</td>
</tr>
<tr>
<td>I listen closely to the ideas of those who disagree with me</td>
<td>3.780</td>
<td>4</td>
<td>0.781</td>
</tr>
<tr>
<td>I let others know who I truly am as a person</td>
<td>3.561</td>
<td>4</td>
<td>1.013</td>
</tr>
<tr>
<td>I seek feedback as a way of understanding who I really am as a person</td>
<td>3.585</td>
<td>4</td>
<td>0.883</td>
</tr>
<tr>
<td>Other people know my point of view on controversial issues</td>
<td>3.634</td>
<td>4</td>
<td>0.848</td>
</tr>
<tr>
<td>I do not emphasize my own point of view at the expense of others</td>
<td>3.756</td>
<td>4</td>
<td>0.820</td>
</tr>
<tr>
<td>I rarely present a “false” front to others</td>
<td>3.122</td>
<td>3</td>
<td>0.968</td>
</tr>
<tr>
<td>I accept the feelings I have about myself</td>
<td>3.756</td>
<td>4</td>
<td>0.849</td>
</tr>
<tr>
<td>My morals guide what I do as a leader</td>
<td>4.000</td>
<td>4</td>
<td>0.698</td>
</tr>
<tr>
<td>I listen carefully to the ideas of others before making decisions</td>
<td>3.927</td>
<td>4</td>
<td>0.745</td>
</tr>
<tr>
<td>I admit my mistakes to others</td>
<td>3.780</td>
<td>4</td>
<td>0.870</td>
</tr>
</tbody>
</table>

Table II. Answers from the study group of nursing students to the individual statements of the Authentic Leadership Questionnaire.
Source: Own study.
However, it is increasingly highlighted that in order to increase their effectiveness, they should be implemented in the second year of bachelor studies, so as to give students the opportunity to apply knowledge and skills in clinical practice [18]. In addition to conducting these classes at an appropriate time point during the course of study, it is worth emphasizing their practical aspect. The classes described in world literature that revealed a significant impact on leadership attitudes in students and were considered effective included mainly practical aspects and allowed the students to carry out a variety of projects on their own. The last element affecting the effectiveness of programs shaping leadership attitudes is mentor care [18]. Successful leadership training can only be conducted by properly trained mentors who have experience in work in a particular field. Importantly, the mentors do not have to have any formal preparation, and the key element in the effectiveness of mentor care is the involvement in mentoring and individual work with the student.

The results of studies on shaping student leadership competencies presented in the world literature are mainly based on educational experiments conducted in a group of students at a particular university, with a limited number of students attending the classes, usually including everyone who is willing to join the course [2–8]. However, the fact that the successfulness and effectiveness of the actions taken for shaping student’s leadership competencies depend on their initial leadership potential is rarely emphasized in literature [18]. Indeed, strengthening the leadership competencies in persons who have natural predispositions (character traits, strengths) to play the role of authentic leaders will be even more successful and effective.

In this study, we evaluated leadership potential among a group of nursing students in Poland. Such results can be an effective tool for identifying future leaders among nursing students. Leadership competencies involve specific core competencies. Despite the worldwide tendency to shape nursing leaders on a large scale, it is important to emphasize clearly that not every graduate will become an effective, authentic leader in future. It is thus necessary to find natural, authentic leaders; that is, people with natural management abilities.

The presented analyses confirmed our hypothesis that overall nursing students in Poland do not have high leadership potential. The largest group of respondents showed a high authentic leadership potential only in the area of self-awareness. The students achieved low results in the three other areas of leadership we assessed, indicating insufficient potential.

In our opinion, it is important to carry out systematic analyses of leadership competencies in order to identify potential authentic leaders among nursing students. We propose that an appropriate training program is only conducted in students with high leadership potential, with the aim of enhancing their strengths in accordance with Galupp’s theory of the four leadership domains [26]. Indeed, training those students with high natural leadership competencies will have a long-term effect, and these persons will likely take over the role of authentic leaders in their future work.

**Limitations**

The presented results have some objective limitations. First, the results only concern students at one university, and therefore, the study should be continued in a larger group of students across Poland. Moreover, the study included only non-working students or those who had only been working in the profession for short time (maximum 2 years). Lack of sufficient professional experience could influence the perception of the questionnaire, although this was not indicated by the Cronbach’s alpha coefficient (0.781). Despite these limitations, our study is the first to analyze the competence of authentic leadership skills among nursing students in Poland, and is one of only a few analyses performed on this issue worldwide.

**Future directions**

Analysis of authentic leadership potential in the nursing student population is important, as our study showed that only a small number of respondents are predisposed to leadership roles. In our opinion, the additional classes for enhancing leadership competencies that are currently available to students should be specifically offered to those with natural leadership abilities, in order to increase the successfulness and effectiveness of this additional education.

**Conclusions**

The overall level of competence for authentic leadership was low in the analyzed student group. Students with higher levels of leadership competencies should be encouraged by their home universities, with individual support systems, to enhance their competences in order to train future leaders in the health care system during the course of their studies.

**Abbreviations**

ALQ: Authentic Leadership Questionnaire; PAPI: pen and paper interview.

**Ethics approval and consent to participate**

Ethical approval was not required for this study. According to the statement of the Bioethics Committee of the Medical University of Warsaw to “The Committee does not provide opinions on questionnaire surveys, retrospective and other non-invasive scientific studies” [19].

**Consent for publication**

Not applicable.

**Availability of data and materials**

Not applicable.
Competing interests
The authors declare that they have no competing interests.

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None.

Authors’ contributions
JG prepared the idea of the article and was a major contributor in writing the manuscript. GJ was responsible for adapting the questionnaire to Polish version. IC conducted the survey, AZ prepared references, LI prepared manuscript for submission, MP analyzed and interpreted the data. All authors read and approved the final manuscript.

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References
19. Opinion of the Bioethics Committee of Medical University of Warsaw; http://komisja-bioetyczna.wum.edu.pl/content/szczeg%C3%B3%C5%82owe-informacje-oraz-wzory-dokument%C3%B3w (accessed: 08.02.2017).